DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019131 Address: 333 Burma Road **Date Inspected:** 01-Jan-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Hua Jie **CWI Present:** Yes No Yes N/A **Rod Oven in Use:** Yes **Inspected CWI report:** No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component: OBG COMPONENT**

Summary of Items Observed:

On this day Caltrans OSM Quality Assurance (QA) Inspector Subhasis Bera was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

In process Inspection

Trial Assembly

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 12AE to 12BE for UT repair splice joint weld No.OBW12D-001. The welder is identified as #044515. ZPMC QC is identified as Mr. Wang Li Yang. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-FCM-REPAIR-1. The repair report is identified as WR19739.

Bay#11

This QA Inspector observed the following work in progress:

SMAW in the 2G position for the OBG bike path, weld No.BK004C8-024-007. The welder is identified as #054460. ZPMC QC is identified as Mr. Yu Dong Ping. The welding variables recorded by QC appear to comply with WPS-345-SMAW-2G(2F)-FCM-REPAIR-1. The repair report is identified as WR16918.

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Bay#10

This QA Inspector observed the following work in progress:

SAW in the 1G position for the OBG bike path, weld No.BK010A1-001-001. The welder is identified as #040460. ZPMC QC is identified as Mr. Yu Zhi Lai. The welding variables recorded by QC appear to comply with WPS-B-T-2221-B-L2c-S-2.

During Quality Assurance (QA) random in process inspection on OBG bike path BK9A-001 at bay #10, this Caltrans QA Inspector observed the following issues that the ZPMC has removed the CJP weld and added one (1) additional plate that are not detailed on the approved shop drawing. This weld joint was removed and additional plate was welded without the Engineer's approval. The component is identified as Bike Path BK009-001, Stringer Plate (BKX20). The additional plate joins the Stringer Plate BKX20A and BKX20B. OBG bike path component is located at Bay #10.

The QA inspector generated an incident report on this date. Ultrasonic Testing (A,B,C and D-Scan)

This QA Inspector performed Ultrasonic testing (UT) verification of the area previously tested and accepted by ABF Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as splice joint joining between bottom Plate to bottom Plate for OBG segment 12AE to 12BE. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure 001 rev.1 that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

OBE12B-001

This QA Inspector performed Ultrasonic testing (UT) verification of the area previously tested and accepted by ABF Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as corner joint joining between edge Plate to side Plate for OBG segment 12AE at bike path side. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure 001 rev.1 that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

CA3003-001

This QA Inspector performed Ultrasonic testing (UT) verification of the area previously tested and accepted by ABF Quality control personnel. This QA inspector generated a (UT) report for this date. The member is identified as corner joint joining between edge Plate to side Plate for OBG segment 12BE at bike path side. The result was recorded onto a data sheet according to rejection criteria of "D" Scan procedure 001 rev.1 that Caltrans QA and ABF QA have jointly filled out on this date. The QA inspector found no rejectable indication at scanned area.

The Weld Designation is as follows

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CA6501-005

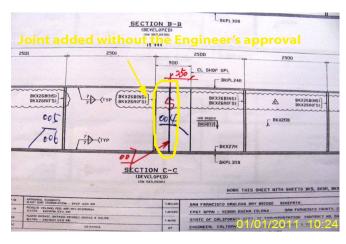
CWR verifications (CWR2634 R0)

Type - (D-scan)

This QA Inspector was notified via email for verification of B – CWR2634 R0 at 1300 hours the following was observed:

- The component for verification was identified as CA6502-009 and OBE12-003 (12AE to 12BE deck panel field splice weld @ A1 and A2)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Zhou Zhog Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-1G(1F)-FCM-Repair-1 and WPS-345-SMAW-4G(4F)-FCM-Repair-1

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









Summary of Conversations:

No relevant conversations

Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera, Subhasis	Quality Assurance Inspector
Reviewed By:	Dsouza, Christopher	QA Reviewer